

## **CLAIMS**

We claim:

1. A method for segmenting a region on a display using an input device, the region composed of a bounded area or volume, the display including one or more regions within a larger area or volume, the input device capable of converting user input into a two or three-dimensional position, the method comprising:
  - a) entering an interactive segmenting mode, then
  - b) interactively specifying a segmentation of the region with the input device, then
  - c) leaving the interactive segmenting mode
2. The method of claim 1 wherein the display further associates a visual control with each region which enables interactive splitting mode, said control to be rendered visible either upon selection of the region, upon entry into the region by a pointing device, or at all times.
3. The method of claim 1 wherein the step of entering and leaving the interactive segmenting mode comprises pressing a button on a computer mouse over a visual control associated with one of the selected regions and subsequently releasing the button.
4. The method of claim 1 wherein the step of entering and leaving the interactive segmenting mode comprises pressing a key on the keyboard and subsequently releasing it.
5. The method of claim 1 wherein the segmentation of the region is computed by independently sectioning the region into rows and/or columns as a function of the distance from the current pointer position to the position of the pointer as it was when the user entered segmenting mode.
6. The method of claim 1 wherein the segmentation of the region is computed by independently sectioning the region into rows and/or columns as a function of the number of times the user has pressed keys on the keyboard indicating that horizontal or vertical segmentation should be increased or decreased.
7. The method of claim 1 wherein the segmentation is applied to the region when the segmenting mode is exited, and the user is further able to abort segmentation, the method for aborting comprising
  - a) Pressing a key, such as the 'escape' key
8. The method of claim 1 wherein the user further receives interactive visual feedback via an overlaid set of lines on the region indicating the actual location of row and/or column divisions that result from his interaction with the input device.
9. The method of claim 1 wherein the user further receives interactive visual feedback via an overlaid grid display indicating the number of rows and/or columns that that result from his interaction with the input device.
10. The method of claim 1 wherein the segmentation of the original region(s) replaces those region(s) with new, independent regions according to the segmentation selected by the user.

11. The method of claim 10 wherein the material contained within the original region(s) are retained within one of the newly-created regions.
12. The method of claim 1 wherein the segmentation of the original region(s) is stored as a collection of subregions of the original region, which continues to exist within the system.
13. A computer readable medium having computer instructions stored thereon for implementing a method for segmenting a region on a display using an input device, the region composed of a bounded area or volume, the display including one or more regions within a larger area or volume, the input device capable of converting user input into a two or three-dimensional position, the method comprising:
  - a) *entering an interactive segmenting mode, then*
  - b) *interactively specifying a segmentation of the region with the input device, then*
  - c) *leaving the interactive segmenting mode*
14. The computer readable medium of claim 13 wherein the display further associates a visual control with each region which enables interactive splitting mode, said control to be rendered visible either upon selection of the region, upon entry into the region by a pointing device, or at all times.
15. The computer readable medium of claim 13 wherein the step of entering and leaving the interactive segmenting mode comprises pressing a button on a computer mouse over a visual control associated with one of the selected regions and subsequently releasing the button.
16. The computer readable medium of claim 13 wherein the step of entering and leaving the interactive segmenting mode comprises pressing a key on the keyboard and subsequently releasing it.
17. The computer readable medium of claim 13 wherein the segmentation of the region is computed by independently sectioning the region into rows and/or columns as a function of the distance from the current pointer position to the position of the pointer as it was when the user entered segmenting mode.
18. The computer readable medium of claim 13 wherein the segmentation of the region is computed by independently sectioning the region into rows and/or columns as a function of the number of times the user has pressed keys on the keyboard indicating that horizontal or vertical segmentation should be increased or decreased.
19. The computer readable medium of claim 13 wherein the segmentation is applied to the region when the segmenting mode is exited, and the user is further able to abort segmentation, the method for aborting comprising
  - a) Pressing a key, such as the 'escape' key
20. The computer readable medium of claim 13 wherein the user further receives interactive visual feedback via an overlaid set of lines on the region indicating the actual location of row and/or column divisions that result from his interaction with the input device.
21. The computer readable medium of claim 13 wherein the user further receives interactive visual feedback via an overlaid grid display indicating the number of rows and/or columns that that result from his interaction with the input device.
22. The computer readable medium of claim 13 wherein the segmentation of the original region(s) replaces

those region(s) with new, independent regions according to the segmentation selected by the user.

23. The method of claim 22 wherein the material contained within the original region(s) are retained within one of the newly-created regions.
24. The computer readable medium of claim 13 wherein the segmentation of the original region(s) is stored as a collection of subregions of the original region, which continues to exist within the system.